MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

Fire King International 900 Park Place New Albany, Indiana 47150

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 043-12142-00026	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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Fire King International New Albany, Indiana

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fireproof file cabinet manufacturing source.

Authorized Individual: Jim Coyle

Source Address: 900 Park Place, New Albany, Indiana 47150
Mailing Address: 900 Park Place, New Albany, Indiana 47150

Phone Number: 812 - 948 - 8400

SIC Code: 2522 County Location: Floyd

County Status: Nonattainment for Ozone

Attainment area for all other criteria pollutants

Source Status: Minor Source Operating Permit

Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) spray painting booth, known as EU17, equipped with an air atomization spray applicator, equipped with dry filters for overspray control, exhausted through Stack 17, installed in 1995, capacity: 1.6 fireproof cabinets per hour.
- (b) One (1) dry powder paint booth, known as powdercoat booth, equipped with an electro-static spray applicator, equipped with dry filters for overspray control, installed in 1984, capacity: 13.3 fireproof cabinets per hour.
- (c) One (1) controlled pyrolysis cleaning furnace, known as EU33, rated at 0.875 million British thermal units per hour, installed in July 1997, exhausted through Stack 33, capacity: 250 pounds of metal parts per hour, with a maximum of 20 pounds of burn-off waste per hour.
- (d) One (1) drying oven, known as dry powder paint, equipped with an 8,800 cfm exhaust fan, installed in 1984, capacity: 13.3 fireproof cabinets per hour.
- (e) Six (6) natural gas-fired area heaters, installed in 1978, rated at 0.10 million British thermal units per hour each.
- (f) One (1) natural gas-fired area heater, installed in 1978, rated at 0.25 million British thermal units per hour.
- (g) Three (3) natural gas-fired area heaters, installed in 1978, rated at 0.30 million British thermal units per hour each.
- (h) One (1) natural gas-fired area heater, installed in 1978, rated at 2.50 million British thermal

units per hour.

- (i) Six (6) natural gas-fired Co Ray Vac heaters, installed in 1978, rated at 0.04 million British thermal units per hour each.
- (j) Two (2) natural gas-fired water heaters, installed in 1978, rated at 0.005 million British thermal units per hour each.
- (k) One (1) natural gas-fired water heater, installed in 1978, rated at 0.165 million British thermal units per hour.
- (I) One (1) natural gas-fired water heater, installed in 1978, rated at 0.003 million British thermal units per hour.
- (m) Three (3) natural gas-fired cabinet dry ovens, installed in 1978, rated at 3.00 million British thermal units per hour each.
- (n) One (1) natural gas-fired parts washer (stage 1), installed in 1984, rated at 2.50 million British thermal units per hour.
- (o) One (1) natural gas-fired parts washer (stage 3), installed in 1984, rated at 1.75 million British thermal units per hour.
- (p) One (1) natural gas-fired dry bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
- (q) One (1) natural gas-fired paint bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
- (r) One (1) natural gas-fired casting dry oven, installed in 1978, rated at 3.00 million British thermal units per hour.
- (s) One (1) natural gas-fired test furnace, installed in 1978, rated at 4.00 million British thermal units per hour.
- (t) One (1) natural gas-fired heated air makeup unit, rated at 5.0 million British thermal units per hour, installed in 1998.

SECTION B

GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of PM, PM₁₀, SO₂, and CO is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit PM, PM₁₀, SO₂ or CO to 100 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.
- (c) Any change or modification which may increase potential to emit VOC or NO_X to 100 tons per year from this source, shall cause this source to be considered a major source under Emission Offset, 326 IAC 2-3, and shall require approval from IDEM, OAM prior to making the change.

C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.

C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

> (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.10 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.11 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

> Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.12 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

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- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.18 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.19 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:

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- (1) Copies of all reports required by this permit;
- All original strip chart recordings for continuous monitoring instrumentation;
- (3) All calibration and maintenance records;
- (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports does do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or

- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.21 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) spray painting booth, known as EU17, equipped with an air atomization spray applicator, equipped with dry filters for overspray control, exhausted through Stack 17 installed in 1995, capacity:1.6 fireproof cabinets per hour.
- (b) One (1) dry powder paint booth, known as powdercoat booth, equipped with an electro-static spray applicator, equipped with dry filters for overspray control, installed in 1984, capacity: 13.3 fireproof cabinets per hour.
- (c) One (1) controlled pyrolysis cleaning furnace, known as EU33, rated at 0.875 million British thermal units per hour, installed in July 1997, exhausted through Stack 33, capacity: 250 pounds of metal parts per hour with a maximum of 20 pounds of burn-off waste per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compounds (VOC) content of coating delivered to the applicators in the spray painting booth, known as EU17 shall be limited to 3.5 pounds of VOC per gallon of coating less water, for extreme performance coatings.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the spray painting booth, known as EU17, and the dry powder paint booth, known as powdercoat booth, shall not exceed the pound per hour emission rates established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Incinerator [326 IAC 4-2]

Pursuant to 326 IAC 4-2-2 (Incinerators: requirements), the one (1) controlled pyrolysis cleaning furnace, known as EU33, shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 and 326 IAC 2;

- (d) Be maintained properly as specified by the manufacturer and approved by the commissioner;
- (e) Be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner:
- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators:
- (g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- (h) Not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- (i) Not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emission units and any control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each day based on the total volatile organic compound usage for the most recent month.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the spray painting booth, known as EU17, and/or the dry powder paint booth, known as powdercoat booth, are in operation.

D.1.8 Afterburner Operation

The afterburner for control shall be in operation at all times when the incineration process is in operation.

D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth Stack 17 while one (1) or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents; and
 - (2) A log of the dates of use.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (d) One (1) drying oven, known as dry powder paint, equipped with an 8,800 cfm exhaust fan, installed in 1984, capacity: 13.3 fireproof cabinets per hour.
- (e) Six (6) natural gas-fired area heaters, installed in 1978, rated at 0.10 million British thermal units per hour each.
- (f) One (1) natural gas-fired area heater, installed in 1978, rated at 0.25 million British thermal units per hour.
- (g) Three (3) natural gas-fired area heaters, installed in 1978, rated at 0.30 million British thermal units per hour each.
- (h) One (1) natural gas-fired area heater, installed in 1978, rated at 2.50 million British thermal units per hour.
- (i) Six (6) natural gas-fired Co Ray Vac heaters, installed in 1978, rated at 0.04 million British thermal units per hour each.
- (j) Two (2) natural gas-fired water heaters, installed in 1978, rated at 0.005 million British thermal units per hour each.
- (k) One (1) natural gas-fired water heater, installed in 1978, rated at 0.165 million British thermal units per hour.
- (I) One (1) natural gas-fired water heater, installed in 1978, rated at 0.003 million British thermal units per hour.
- (m) Three (3) natural gas-fired cabinet dry ovens, installed in 1978, rated at 3.00 million British thermal units per hour each.
- (n) One (1) natural gas-fired parts washer (stage 1), installed in 1984, rated at 2.50 million British thermal units per hour.
- (o) One (1) natural gas-fired parts washer (stage 3), installed in 1984, rated at 1.75 million British thermal units per hour.
- (p) One (1) natural gas-fired dry bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
- (q) One (1) natural gas-fired paint bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
- (r) One (1) natural gas-fired casting dry oven, installed in 1978, rated at 3.00 million British thermal units per hour.
- (s) One (1) natural gas-fired test furnace, installed in 1978, rated at 4.00 million British thermal units per hour.
- (t) One (1) natural gas-fired heated air makeup unit, rated at 5.0 million British thermal units per hour, installed in 1998.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

There are no emission limitations and standards or compliance monitoring requirements specifically applicable to the above emission units.

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT

FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

and to qualify for the exemption under 326 IAC 1-6-4.
THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OXIDES?, 2 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCED SULFUR? 25 TONS/YEAR REDUCED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 100 TONS/YEAR CARBOI MONOXIDE?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD? OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMEN OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y
COMPANY: PHONE NO. :
COMPANY: PHONE NO. : LOCATION: (CITY AND COUNTY) PERMIT NO. AFS PLANT ID: AFS POINT ID: INSP: CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:
DATE/TIME MALFUNCTION STARTED:// 20 AM / I ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE// 20 AM / PN
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:
MEASURES TAKEN TO MINIMIZE EMISSIONS:
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:
CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: INTERIM CONTROL MEASURES: (IF APPLICABLE)
MALFUNCTION REPORTED BY: TITLE: TITLE:
MALFUNCTION RECORDED BY:

*SEE PAGE 2

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Fire King International New Albany, Indiana Permit Reviewer: MLK/MES

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

* <u>Essential services</u> are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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Fire King International New Albany, Indiana Permit Reviewer: MLK/MES

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Fire King Interna	tional		
Address:	900 Park Place			
City:	New Albany, Indi	iana 47150		
Phone #:	812 - 948 - 8400			
MSOP #:	043-12142-00026			
hereby certify that Fire	King International is	9 still in operation.9 no longer in operation.		
hereby certify that Fire	King International is	9 in compliance with the requirements of MSOP 043-12142-00026 .		
		9 not in compliance with the requirements of MSOP 043-12142-00026 .		
Authorized Individual	(typed):			
Title:				
Signature:				
Date:				
f there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.				
Noncompliance:				

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT SEMI-ANNUAL COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address: MSOP #:	· · · · · · · · · · · · · · · · · · ·					
	Months:	_ to _	Year:			
this permit. This r requirements and necessary. This f	eport shall be submitt the date(s) of each of form can be supplement	ed sem leviation ented by	met all the compliance monitori- i-annually. Any deviation from must be reported. Additional attaching the Emergency/De box marked "No deviations occ	n the compliant the compliant the compliant the complex through the complex through the complex through the compliant through the complex through the compliant through the complex throug	nce monitoring be attached if irrence Report.	
9 NO DEVIATION	IS OCCURRED THIS	REPOF	RTING PERIOD.			
9 THE FOLLOWIN	NG DEVIATIONS OC	CURRE	D THIS REPORTING PERIO) .		
	Monitoring Requirement	nt	Number of Deviations	Date of ea	ach Deviation	
	Form Completed By Title/Position: Date: Phone:	:				

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Fire King International

Source Location: 900 Park Place, New Albany, Indiana 47150

County: Floyd

Construction Permit No.: MSOP 043-12142-00026

SIC Code: 2522

Permit Reviewer: Mark L. Kramer

On September 3, 2000, the Office of Air Management (OAM) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Fire King International had applied for a construction permit to construct and operate a fire proof file cabinet manufacturing source with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 2, 2000, Evelyn Crooks of Environmental Compliance Source, Ltd., on behalf of Fire King International, submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as strikeouts and new language **bolded.**

Comment 1:

The authorized individual is Jim Coyle.

Response 1:

Condition A.1 has been revised to show the change in the Authorized Individual as follows:

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fireproof file cabinet manufacturing source.

Authorized Individual: Allen Mills Jim Coyle

Source Address: 900 Park Place, New Albany, Indiana 47150
Mailing Address: 900 Park Place, New Albany, Indiana 47150

Phone Number: 812 - 948 - 8400

SIC Code: 2522 County Location: Floyd

County Status: Nonattainment for Ozone

Attainment area for all other criteria pollutants

Source Status: Minor Source Operating Permit

Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

Comment 2:

This is a permit renewal application. Please explain why an affidavit of construction is required.

Response 2:

Since this permit is for a renewal which included an emission unit that was not previously permitted, Conditions B.4 has been revised and Condition B.5 and B.6 have been deleted as follows:

B.4 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction

 Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the

permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

Comment 3:

Condition C.17(b) did not contain a mailing address for the annual emission statement.

Response 3:

The address has been added to Condition C.17(b) as follows:

C.17 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Comment 4:

Fire King requests that the demonstration in Condition D.1.6 be on a monthly, not daily, basis due to the lack of clerical staff to perform daily calculations.

Response 4:

Condition D.1.6 states:

D.1.6 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each day based on the total volatile organic compound usage for the most recent month.

Condition D.1.1 requires compliance with the VOC content required by 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations). Since the rule requires compliance on a daily basis, Condition D.1.6 requires that compliance, for example, on day 1 be demonstrated within 30 days.

Comment 5:

Condition D.1.10(a)(3): There is no daily usage limitation in any condition of this permit. Fire King requests that the VOC usage records be totaled by month, not each day. Fire King does not have the capability to do this at daily intervals.

Response 5:

Condition D.1.10(a)(3) has been deleted as follows since all coatings presently used comply with 326 IAC 8-2-9 and there are no VOC usage limitations:

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents; and
 - (2) A log of the dates of use.; and
 - (3) The total VOC usage for each day.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name: Fire King International

Source Location: 900 Park Place, New Albany, Indiana 47150

County: Floyd SIC Code: 2522

Operation Permit No.: MSOP 043-12142-00026

Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed an application from Fire King International relating to the construction and operation of a fireproof file cabinet manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) spray painting booth, known as EU17, equipped with an air atomization spray applicator, equipped with dry filters for overspray control, exhausted through Stack 17 installed in 1995, capacity:1.6 fireproof cabinets per hour.
- (b) One (1) dry powder paint booth, known as powdercoat booth, equipped with an electro-static spray applicator, equipped with dry filters for overspray control, installed in 1984, capacity: 13.3 fireproof cabinets per hour.
- (c) One (1) controlled pyrolysis cleaning furnace, known as EU33, rated at 0.875 million British thermal units per hour, installed in July 1997, exhausted through Stack 33, capacity: 250 pounds of metal parts per hour with a maximum of 20 pounds of burn-off waste per hour.
- (d) One (1) drying oven, known as dry powder paint, equipped with an 8,800 cfm exhaust fan, installed in 1984, capacity: increasing from 6.52 to 13.3 fireproof cabinets per hour.
- (e) Six (6) natural gas-fired area heaters, installed in 1978, rated at 0.10 million British thermal units per hour each.
- (f) One (1) natural gas-fired area heater, installed in 1978, rated at 0.25 million British thermal units per hour.
- (g) Three (3) natural gas-fired area heaters, installed in 1978, rated at 0.30 million British thermal units per hour each.
- (h) One (1) natural gas-fired area heater, installed in 1978, rated at 2.50 million British thermal units per hour.

- Permit Reviewer: MLK/MES
 - (i) Six (6) natural gas-fired Co Ray Vac heaters, installed in 1978, rated at 0.04 million British thermal units per hour each.
 - (j) Two (2) natural gas-fired water heaters, installed in 1978, rated at 0.005 million British thermal units per hour each.
 - (k) One (1) natural gas-fired water heater, installed in 1978, rated at 0.165 million British thermal units per hour.
 - (I) One (1) natural gas-fired water heater, installed in 1978, rated at 0.003 million British thermal units per hour.
 - (m) Three (3) natural gas-fired cabinet dry ovens, installed in 1978, rated at 3.00 million British thermal units per hour each.
 - (n) One (1) natural gas-fired parts washer (stage 1), installed in 1984, rated at 2.50 million British thermal units per hour.
 - (o) One (1) natural gas-fired parts washer (stage 3), installed in 1984, rated at 1.75 million British thermal units per hour.
 - (p) One (1) natural gas-fired dry bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
 - (q) One (1) natural gas-fired paint bake oven, installed in 1978, rated at 0.50 million British thermal units per hour.
 - (r) One (1) natural gas-fired casting dry oven, installed in 1978, rated at 3.00 million British thermal units per hour.
 - (s) One (1) natural gas-fired test furnace, installed in 1978, rated at 4.00 million British thermal units per hour.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(t) One (1) natural gas-fired heated air makeup unit, rated at 5.0 million British thermal units per hour, installed in 1998.

New Emission Units and Pollution Control Equipment

There are no new facilities proposed at this source during this review process.

Emission Units and Pollution Control Equipment Removed From Source

Note the one (1) spray painting air drying room, equipped with 200 cfm exhaust fan with a capacity of 6.52 units per hour has been removed from the source.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) CP 043-4178-00026, issued on July 3, 1995 and

(b) CP 043-8652-00026, issued on August 27, 1997.

All conditions from previous approvals were incorporated into this permit.

Air Pollution Control Justification as an Integral Part of the Process

Pursuant to CP 043-8652 issued August 27, 1997, the company submitted the following justification such that the afterburner be considered as an integral part of the incineration process:

The furnace contains a single chamber with a direct flame afterburner, which is an integral part of the furnace design.

IDEM, OAM evaluated the justifications and agreed that the afterburner will be considered as an integral part of the incineration process. Therefore, the permitting level will be determined using the potential to emit after the afterburner. Operating conditions in the proposed permit will specify that this afterburner shall operate at all times when the incineration process is in operation.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
17	Paint Booth	22.3	2.00	9,300	ambient
18	Curing Oven	17.5	0.42	3,850	150 - 160
33	Pyrolysis Oven	22.0	1.17	1,100 - 1,600	1,400 - 1,600

Enforcement Issue

- (a) IDEM is aware that equipment has been operated prior to receipt of the proper permit for increasing capacity. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (c) The unpermitted natural gas-fired heated air makeup unit, rated at 5.0 million British thermal units per hour, installed in 1998 is not being referred to enforcement because it was exempt pursuant to 326 IAC 2-1.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 6, 2000, with additional information received on June 21 as well as July 5, 6, and 17, 2000.

Emission Calculations

See Appendix A pages 1 - 4 of 4 of this document for detailed emissions calculations. Note that stages 2, 4 and 5 of the parts washer does not emit VOC, HAPs or have any combustion present.

Potential To Emit From the Entire Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	97.9
PM ₁₀	98.6
SO ₂	0.192
VOC	25.1
СО	11.9
NO_X	13.8

HAPs	Potential To Emit (tons/year)
Toluene Diisocyanate	0.024
Toluene	4.33
Benzene	0.0003
Dichlorobenzene	0.0002
Formaldehyde	0.010
Hexane	0.246
Lead Compounds	0.00007
Cadmium Compounds	0.0002
Chromium Compounds	0.0002
Manganese Compounds	0.00005
Nickel Compounds	0.0003
TOTAL	4.61

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM_{10} are equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.000
PM ₁₀	0.821
SO ₂	0.000
VOC	3.28
СО	0.000
NO _X	0.000

No previous HAPs emission data have been received from the source.

Limited Potential to Emit From the Entire Source

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

		Limited Potential to Emit (tons/year)										
Process/facility	PM	PM ₁₀	SO ₂	voc	СО	NO _x	HAPs					
Surface Coating Operations	1.22	1.22	0.00	24.3	0.00	0.00	4.35					
Combustion	0.260	1.04	0.082	0.751	11.5	13.7	0.260					
Incineration	0.307	0.307	0.110	0.131	0.438	0.131	negligible					
Total Emissions	1.79	2.57	0.192	25.2	11.9	13.8	4.61					

County Attainment Status

The source is located in Floyd County.

Pollutant	Status				
PM ₁₀	attainment				
SO ₂	attainment				
NO ₂	attainment				
Ozone	moderate nonattainment				
СО	attainment				
Lead	attainment				

(a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation

of ozone. Therefore, VOC and NO_{χ} emissions are considered when evaluating the rule applicability relating to the ozone standards. Floyd County has been designated as non-attainment for ozone. Therefore, VOC and NO_{χ} emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) Floyd County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (d) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2,
 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance
 Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and
 volatile organic compound (VOC) emissions are not counted toward determination of PSD
 and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source. The pyrolysis cleaning furnace, known as EU33, is not subject to NSPS Subpart E (40 CFR Part 60.50) and 326 IAC 12, because the paint residues being combusted do not meet the definition of solid waste as defined by 40 CFR Part 60.51(b).
- (b) This pyrolysis cleaning furnace is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart EEE because the cleaning furnace is a industrial furnace process which is exempt for this rule. The furnace cleans the metal which is then used in product manufacturing.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC in Floyd County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 4-2 (Incinerators)

The one (1) controlled pyrolysis cleaning furnace, known as EU33, which emits regulated pollutants shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 and 326 IAC 2;
- (d) Be maintained properly as specified by the manufacturer and approved by the commissioner;
- (e) Be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators:
- (g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- (h) Not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- (i) Not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the spray painting booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in com-

pliance with this requirement.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the spray painting and the dry powder paint booths shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

The dry filters shall be in operation at all times the spray painting and dry powder paint booths are in operation, in order to comply with this limit.

326 IAC 8-3-2 (Cold Cleaner Operations)
326 IAC 8-3-3 (Open Top Vapor Degreaser Operation)
326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The two (2) parts washers are not subject to these rules since they do not used solvents. They use either Sodium Hydroxide and Sodium Silicate or Ammonium Biflouride and Hydroxylamine Sulfate.

326 IAC 20-6 (Halogenated Solvent Cleaning)

The two (2) parts washers are not subject to this rule which incorporates the requirements of 40 CFR 63 Subpart T.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations on pages 2 and 4 of 4 of Appendix A.

Conclusion

The operation of this fireproof file cabinet manufacturing source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 043-12142-00026.

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Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: Fire King International, Inc.

Address City IN Zip: 900 Park Avenue, New Albany, IN 47150

MSOP: 043-12142 Plt ID: 043-00026 Reviewer: Mark L. Kramer

Date: April 12, 2000

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per		Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)		Tra Effic
pray Painting Booth, EU-17																
Polane HS	10.41	32.90%	0.0%	32.9%	0.0%	60.35%	1.00000	1.600	3.42	3.42	5.48	131.52	24.00	24.48	5.68	50
Solvent Blend	6.99	100.00%	0.0%	100.0%	0.0%	0.00%	73.61345	0.00011	6.99	6.99	0.06	1.41	0.26	0.00	n/a	10
Dry Powder Paint Booth																
VEDOC	13.60	0.00%	0.0%	0.0%	0.0%	100.00%	0.36765	13.300	0.00	0.00	0.00	0.00	0.00	72.82	0.00	7!
·								PM	Control Efficiency	95.00%						

State Potential Emissions Add worst case coating to all solvents Uncontrolled 5.54 132.93 24.26 97.29

Controlled 5.54 132.93 24.26 1.22

METHODOLOGY

Solvent blent usage scaled from 1 gallon per week to potential usage of 73.61 gallons per year s of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

s of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

ial VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

ial VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

 $ial\ VOC\ Tons\ per\ Year = Pounds\ of\ VOC\ per\ Gallon\ coating\ (lbs/gal)\ ^*\ Gal\ of\ Material\ (gal/unit)\ ^*\ Maximum\ (units/hr)\ ^*\ (8760\ hr/yr)\ ^*\ (1\ ton/2000\ lbs)$

ılate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

s VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

- Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations HAP Emission Calculations

Company Name: Fire King International, Inc.

Address City IN Zip: 900 Park Avenue, New Albany, Indiana 47150

MSOP: 043-12142
Plt ID: 043-00026
Reviewer: Mark L. Kramer
Date: April 12, 2000

Toluene

Material	Density	Gallons of Material		Weight %	Weight %			Diisocyanate Emissions	Toluene Emissions			
	(lbs/gal)	(gal/unit)	(unit/hour)	Toluene	Toluene			(tons/yr)	(tons/yr)			
				Diisocyanate								
ne HS Plus Enamel Base	11.60	1.00000	1.600	0.00%	5.00%			0.00	4.06			
Catalyst V66V44	9.32	0.11167	0.875	0.60%	0.00%			0.02	0.00			
Reducer R6K30	6.76	0.11167	0.875	0.00%	0.00%			0.00	0.00			
Solvent Blend	6.99	73.61	0.00011	0.00%	100.00%			0.00	0.26			

METHODOLOGY Individual Total 0.024 4.322

METHODOLOGY Overall Total 4.346

ent Blends composes of unspecified weights of HAPs: toluene, xylene, and methyl alcohol, assumed 100% toluene (worst case)

3 emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Page 2 of 5 TSD

Natural Gas Combustion Only MM BTU/HR <100

Small Industrial Boiler

Company Name: Fire King International, Inc.

Address City IN Zip: 900 Park Avenue, New Albany, IN 47150

MSOP: 043-12142 Plt ID: 043-00026 Reviewer: Mark L. Kramer Date: April 12, 2000

Pyrolysis Furnace	0.875
Air Make-up Unit	5.000
6 Area Heaters @0.1 ea	0.600
Area Heater	0.250
Area Heater	0.300
Area Heater	2.500
6 Ray Vac Heater @0.04 ea	0.240
2 Water Heaters @0.005 ea	0.010
Water Heater	0.165
Water Heater	0.003
3 Cabinet Dry Ovens @ 3.0 ea	9.000
Stage Parts Washer	2.500
Stage Parts Washer	1.750

Heat Input Capacity Potential Throughput Dry Bake Oven 0.500 Paint Bake Oven MMBtu/hr MMCF/yr 0.500 Casting Dry Oven 3.000 Test Furnace 31.193 273.25 4.000

Total 31.193

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.260	1.038	0.082	13.663	0.751	11.477

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler

HAPs Emissions

Company Name: Fire King International, Inc.

Address City IN Zip: 900 Park Avenue, New Albany, IN 47150

MSOP: 043-12142 Plt ID: 043-00026 Reviewer: Mark L. Kramer Date: April 12, 2000

HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.869E-04	1.640E-04	1.025E-02	2.459E-01	4.645E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	6.831E-05	1.503E-04	1.913E-04	5.192E-05	2.869E-04

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations Incinerator

Company Name: Fire King International, Inc.

Address City IN Zip: 900 Park Avenue, New Albany, IN 47150

MSOP: 043-12142 Plt ID: 043-00026 Reviewer: Mark L. Kramer

Date: April 12, 2000

THROUGHPUT lbs/hr 20 THROUGHPUT tons/yr 87.6

	POLLUTANT									
	PM	SO2	CO	VOC	NOX					
Emission Factor in lb/ton	7.0	2.5	10.0	3.0	3.0					
Potential Emissions in ton/yr	0.307	0.110	0.438	0.131	0.131					

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)